

Corn is the most relished by poultry of all grains.

To make money is the chief object of breeding pedigree hogs.

Systematic work is required to rid

a poultry house of mites or lice. The feed and feeding is the first im-

portant point in successful dairying.

One of the most successful pigeon raisers feeds his birds nothing but whole corn.

Never feed soured or tainted food of any kind to the chicks, or to the old fowls either

It takes a good manager to make

a profit of \$2 per head each year from a single pair of breeders. The sheep industry cannot reach

perfection until every mongrel dog in the land is exterminated. There is one rule always to be re-

are hatched in the same nest. It is best not to put sawdust in the poultry house, as it gathers too much

moisture and causes dampness.

membered: Never mate birds that

It is a fact that the dogs destroy more sheep in some certain states than all the diseases combined.

Keep sows and pigs away from fattening hogs, and give them feeds that produce flesh and bone rather than

the inside of the hen house and it will be lighter and cleaner during the entire winter.

Cabbage is one of the very best vegetables to feed to poultry, as it machine clippers. keeps green a long time and the chickens enjoy picking at it.

fresh egg class, should not be over three days old in summer weather, and a week old during winter.

If a man allows his chickens to roam amid the mud and slush of the yards will continue to breed every month in the fall, he is preparing the way thereafter. for some sick fowls this winter.

chicken business from the start will every bird in the flock flying to her be the man who does things, not he feet by a single particular cry she who waits for a favorable opporunity

Get rid of the cockerels as rapidly as they get large enough and thus cut

If good, clean, sound grain in abundance, and a variety, with pure water, grit oyster shell and meat in some form, will not produce eggs, nothing else will.

Only an expert is able to tell by the smell just when the cream is right for churning. It then has a clean, sour taste and smells like nuts fresh from the woods.

Impure air, as well as dampness, are a danger to any flock. Separate the flocks in bunches of 25 or 50 and feed them separately and they will make much better gains.

Always make the nest boxes easily removable so that they may be frequently taken out of the house and cleaned, disinfected and treated for the destruction of vermin.

. The dairy farmer who does not build a silo usually has some reason which is satisfactory to him, but he cannot longer use the excuse that silage has a detrimental effect on milk quality.

It is a mistake to discard a breed on the supposition that it is not a hardy one. Hardiness can be instilled in any breed by proper housing, proper food, proper attention, and systematic breeding.

The time of milk giving is largely calving, no matter how long she has conditions to produce the best wool been giving milk.

The scales and a Babcock tester, when rightly used, will accurately de- dulryman and to the most advanced termine whether any of your cows cattle feeders, the use of the silo and are "grafters" just as surely as a pair the feeding of ensilage is recognized of farm scales will show the exact as being necessary to the greatest sucyield of corn.

The old hen, the carelessly inbred hen, the mongrel without a well-bred ancestry, keep the egg-production of this country down to seventy-five eggs average per year. A little more care this and double the revenue from the poultry yards of this country.

A lousy hen is always a poor layer. Make the by-products of the dairy

Corn will make hens fat but it will not make them lay eggs.

The better bred the horse is, the more generally useful he is.

For fall feeding of dairy cattle sweet corn is exceedingly valuable.

The separator needs to be set perfectly level on a solid foundation.

The feed bill of the poultry yard can be cut in two if you know how.

Continued care in handling the dairy products is the price of success.

The value of sflage as the cheapest and best succulent for cattle and hogs is fully established.

Regularity in feeding and milking will go a long ways towards making dairy work successful.

All milk utensils should be heavfly tinned and as free from seams as it is possible to get them,

Many of the irregularities in the health of the farm stock can be traced to injudicious feeding.

Wooden pails readily absorb milk particles, making it almost impossible to keep them sweet and clean.

The hatching-egg trade and the raising of stick for breeders have assumed the dignity of specialties.

It is to the poultryman's interest to keep his stock up to the best type,

healthy and vigorous all the time. A cold rain, fall or spring rain, will check the milk flow as much as a

It will be noticed that though the prices of other farm stock are falling off, the dairy cow still holds her own.

snow storm if the cows are exposed.

In hot weather lice breed in pigeon houses by the million and extra care must be taken to keep down the ver-

Rats in a pigeon house not only destroy the young but their presence Thoroughly clean and whitewash frightens the birds so that they will not thrive.

> If one has a large flock of sheep much time will be saved and better results obtained by the use of the

Sheep are extremely nervous and when being fattened for market they An egg, to belong to the strictly must be quiet and free from sudden alarm which will cause excitement.

> Pigeons hatched in March are matured and ready for breeding in July and if the surroundings are congenial

A young girl who raises about 100 He who makes a success in the White Plymouth Rocks, always brings utters.

It is as impossible to estimate the productiveness and value of a cow as off the feed bill and protect the others it is to guess the exact number of of the flock from these scrappy young. bushels of corn a certain field will yield.

> While sheep will eat grain and any kind of grass and some kinds of weeds, they are, after all, dainty feeders and their feed must be absolutely clean.

> There are several signs that indicate good health-a bright red comb. activity, readiness for food, and a glossy and smooth appearance of the feathers.

> French pigeon fanciers feed millet with a slight mixture of hemp seed. and also very small peas soaked in water. The feeding is done by hand in many cases.

The Massachusetts experiment station says that lime is an aid to good farming but cannot take the place of fertilizers, stable manure, thorough cultivation and proper crop rotation.

A small flock of sheep in addition to furnishing excellent profit and keeping down weeds, furnishes the most practical meat supply for the farmer, especially during the summer.

Every colt should be taught a fast walking gait. This can be done by gently pushing him while walking but he should never be urged too long at a time before changing his

If we feed and care for sheep we influenced by the period of gestation, are fattening as they should be cared as usually the cows will be ready to for to make the most profit from this dry up from six to four weeks before mutton, we also supply the very best in the combing class.

> To the up-to-date and progressive cess in their respective lines of business.

The farmer ought to be able to produce eggs at a feed cost of about eight cents a dozen. To do this he must keep the hens which will make in feeding and breeding would double the best showing, instead of a lot of mongrels of no breeding and without laying capacity.

VALUABLE EXPERIMENTS WITH SHEEP AT MINNESOTA STATION

Pastures Grown So That, If Possible, Some Variety Would Always Be in Season-Remarkable Results Achieved by Reeping Land Working-Soil Was a Sandy Loam.



A Profitable Flock

In experimental work in growing | and cabbage. Of these winter rye pasture for sheep at the Minnesota was first in season and was the only Experiment Station about 100 sheep and lambs were pastured on 10 acres Rape provided pasture for a longer of land from May 1 to November 1. period than any of the other plants, Almost two-thirds of the entire num- and, taking it all in all, proved the ber were sheep and one-third lambs. In addition to the pasture a fraction over 10 tons of fodder and over 10 tained from cabbage. tons of green food were taken from the same land. Nearly as much food was taken from the pasture the previous year, says the Agriculturist. On plowed and sown with corn, sorghum a single acre six sheep and 10 lambs were pastured five months. The land was a sandy loam, not half as good as the winter rye after one or the other the average soil in Minnesota. It was of these crops had been grazed down not high in fertility, having been fer- As soon as the rye pasture was gone tilized only once with farmyard ma- the oats and barley were ready, and nure during the six previous years, although cropped every year. The secret of this wonderful return lay in some instances oats and peas were keeping the land at work.

were grazed when the weather was that were being beaten down. The grazed down sheep were grazed on these in the forenoon and in the afternoon, and were given the freedom of the shed and of the adjoining yard in the middle of the day and also at night.

ley sown together, corn, sorghum, rape i are fully developed.

COVERING FOR

variety that furnished early pasture, most valuable plant. But the greatest amount of pasture per acre was ob-

Rye, as stated above, was first in season. As soon as it ceased to provide pasture abundantly, the land was or rape, and in some instances it was sown again in the early autumn with when eaten down this crop was followed at once with corn or rape. In sown and with satisfactory results. Two and one-half acres of land Sorghum was usually followed by winwere kept in grass. On this the sheep | ter rye. Corn was sown at any time occasion offered after the weather had wet and when other pasture was not become sufficiently warm. Rape was ready. The pastures were grown so also sown any time from the opening that, if possible, some variety would of spring until the middle of July. It always be in season. Movable hurdles was the chief reliaance for fall paswere used to inclose the plat or plats ture and cabbage was the last food

The chief essentials for the production of winter eggs, are pullets, that have had the best of care from the The foods grown that proved most very beginning, and have been pushed useful were winter rye, oats and bar- from the time of hatching until they

CEMENT FLOOR IS SUPERIOR

Practical and Economical Method For Keeping Out Leaves, Dust and Undesirable Things.

A FARM WELL

Here is a sketch of how I cover my well on Richwood farm, says a writer in the Farm and Home. The 18-inch tile makes a most excellent curb. Then a lid cut out of boiler iron to just fit within the flange of the tile will keep out all leaves, dust and other undesirable things. A handle can be placed on the upper side of the lid, and a hook on the underside on which to hang the bucket and rope will make a most complete arrangement.

If your well is in the branch or creek bottom and the floods get over t they cannot damage it, for the water cannot get under the lid to raise it. I fixed one in the bed of a creek



Well Curb and Cover.

10 years ago and the floods have been over it many times, yet when a dry spell comes and the owner is compelled to resort to well water, he cleans the sand from around the lid. pries it up and goes to drawing water. Every other device to keep a well in the bottom of the creek bed has failed

Around the barn lot and for a stock well there are no boards or timbers to rot and let the stock fall into the well, nor to harbor rats and snakes. A well drawn in and covered in this manner seldom freezes over in winter and the water is kept cooler in summer than in an open well or one over which only boards am laid.

Managing Ducks.

In managing ducks for market it has been found highly destrable to emphafeed consisting of three parts corn- grain diet substituted. meal, two of bran and one of meat meal or beef scrap. In two to four weeks this ration and way of managing has always proved satisfactory in immediately after it is drawn from fattening the birds.

Not Only Practicable but Will Return Big Profits in Saving Build One.

In response to a query regarding a cement floor for saving manure, Mr. S. S. Staley of Ohio, makes the following reply in the Breeder's Gazette.

Bulletin No. 183 of the Ohio Experi ment Station says that the saving of manure from 58 head of cattle, 28 on hard earth floor and 24 on cement floor, was \$50 more on the cement than on the earth floor. It is stated also that half the cost of the cement floor was saved in six months' feeding. So one sees it is not only practicable but will pay big returns in saving manure, to say nothing of having the cattle wading knee-deep in the mud.

A concrete yard floor can be put down directly on the earth, after scraping off the top-soil until a hard level floor is obtained; but it is best to excavate 10 or 12 inches and fill in with 6 or 8 inches of gravel or cinders, so that water will not stand under the concrete and cause it to heave by frost. A curb or wall of concrete 18 inches deep should be built all around to keep out rats, and also from being undermined by hog wallows. For cattle the floor had best be 6inches thick and for the hog floor 4 inches. A mixture of 1 cement, 2 sand and 4 parts of crushed stone passing through an inch mach, will make a good floor. If pit of creek gravel is used, which has about that proportion of sand and gravel, our custom here is to use one barrel (4 sacks) to one yard of gravel. All this work can be done by the farm help, if some one with some knowledge or experience can be had to superintend it.

Raising Calves.

The future usefulness of the cow depends a great deal upon how the calf is brought up during the first year. It should have plenty of water and salt presented in clean vessels, sudden changes of diet avoided and regularity of feeding practiced. Warm, dry quarters are necessary if the weather is damp. Plenty of roughage should be fed and not too much grain, for then a large capacity for handling food, so desirable in dairy animals, will be developed. When six months size cleanliness, pure drinking water, old milk should be omitted from the good ventilation and to provide ample calf's ration and a full roughage and

> Separating Milk. The best time to separate milk is

the cow, before it gets cold.

CODLING MOTH DESTRUCTIVE INSECT IN APPLE ORCHARDS

With Possible Exception of San Jose Scale it Causes More Damage Than Any Other Pest-Everything Should be Gotten in Readiness for First Spraying in the Spring.

(By J. E. BUCK, Virginia.) San Jose scale the codling moth is the

our orchardists have to contend. These worm pests, which leave the to each 50 gallons of spray to preapples in late summer and fall, hide vent possible damage to fruit and and spin cocoons under bark scales, foliage. in rubbish about trees, in decayed places on the tree, and about apple bins and storage houses. In these

cocoons they pass the winter. get warm, the worm changes to splits the case and crawls out.

the temperature conditions governing the blooming of apple trees also occasion the appearance of the moths in the spring. This habit of the moth furnishes the very best opportunity of combating it. After the petals fall from the bloom, for a period of a week or ten days, the calyx cavity remains more or less open, and the young apples more or less upright.

As 70 per cent, or more of these first worms enter the young apples at the calyx, or "blossom end," this furnishes an excellent opportunity for filling the calyx cups with poisonous spray, so that when the young worms endeavor to eat their way into the apple they are killed by the poison.

This first application of spray mist spray. should be made inside of a week after the petals fall from the bloom. Everything should be gotten in readiness for this first spraying, for it thorough application of arsenate of fruit. lead at this time. A second applica-



Entilre Crop of Seven Black Twice Trees Sprayed Six Times. Sound, 1032 Apples in Pile on Left; Scabby, 93 in Pile on Right.

three weeks later, to supplement the

ture. The arsenate of lead can be there are many good brands.

applied simply in water, without any With the possible exception of the danger to fruit or foliage. Paris green can also be applied in water, most destructive insect with which but unless used in Bordeaux, 2 pounds of lime should be slaked and added

Six to eight ounces of Paris green should be used to each 50 gallons of spray. In using arsenate of lead 2 pounds to 50 gallons of spray, in mist In the spring, as the days begin to | sprays, has given us the best results. a In mist sprays about 3 gallons were 'pupa" inside the cocoon and soon sprayed on each tree (nine-year-old the pupa changes to a moth, which trees of fair size). Some trees were ten to twelve years old. One and one-It seems quite generally true that fourth pounds of arsenate of lead gave splendid results in drench sprays with high pressure. In drench



Entire Crop of Eight Black Twig Trees, Not Sprayed. Sound, 49 Apples on Left; Scabby, 1030 in Pile on Right.

spray 5 to 6 gallons were sprayed on each tree, which would make about the same amount of poison as in the

Arsenate of lead has proven su perior to Paris green in all the tests. It costs more, but the extra saving of fruit will make up the difference in is certainly the most important of all | cost. Both Paris green and arsenats the sprayings, it being possible to kill of lead, when thoroughly applied, will over 95 per cent, of the worms by one produce a high per cent, of clear

Results of careful tests show that over 99 per cent. of worm-free fruit is possible on the picked apples by spraying with arsenate of lead, and over 98 1/2 per cent., counting all the apples that drop during the summer The mist sprays with Paris green, 4 ounces to 50 gallons, produced as high as 96% per cent, of clean fruit on the picked apples, and 95 per cent., count ing the dropped apples.

In using either poison the utmost care should be taken to have the tion of spray should be made two to exact amount desired. Either poison should be thoroughly mixed in a little water before putting in the spray Either Paris green or arsenate of barrel or tank. A good brand of ar-lead can be applied in Bordeaux mix- senate of lead should be used, and

MISTAKES IN HOG FEEDING

Kansas Station Enumerates Sixteen Errors That Are Quite Commonly Made in Swine.

(By J. L. STANTON, Kansas Station.) It is a mistake for one inexperienced to undertake the feeding of hogs unless he expects to make study of it and improve upon his mistakes.

It is a mistake for the city farmer living in town to trust his hogs to the way. the average hired man. He is not likely to make a success of it,

It is a mistake to try to raise hogs on an exclusive diet. You ask what kind of feed to give them? What kind of feed can be produced on your farm in your locality? Give them plenty of that in variety. These feeds should be given in such relation to each other as to meet the varied needs of the swine system.

It is a mistake to forget that the hog is a grazing animal.

It is a mistake if the hog, is not fed in a clean place free from dust and mud.

It is a mistake to overfeed or underfeed.

It is a mistake not to feed the liquid before the solid food.

It is a mistake to feed constipating food and do nothing to correct it. It is a mistake to feed breeding stuff as if you were fitting it for the market.

It is a mistake to feed all sizes to gether whenever the smaller ones are at a disadvantage. It is a mistake not to provide the herd with comfortable quarters at aff

times. Failure in this will impair the usefulness of the feed. It is a mistake not to grow the pigs rapidly from birth to market. They

should gain every pound possible on It is a mistake to feed the brood sow corn before farrowing time. She should have cooling and laxative food. It is a mistake to feed her heavily

for some days after farrowing. It is a mistake to feed the pigs sour milk when they are learning to

It is a mistake to fail to feed pigs bone and muscle making material during their growth.

Feeding Calves.

We know an Indiana farmer who choked two fine calves to death by feeding them dry oats before he made up his mind his youngsters would do better on something else.

SHOAT FEEDING EXPERIMENT



The New Hampshire Experiment | dlings and skim milk a gain of 129 pc Station reports useful experiments in unds, at a cost of 8.2 cents per pound; feeding shoats. Fifteen of the shoats and on shelled corn, corn, middlings a were divided into five lots and fed for | nd molasses a gain of 104.8 pounds, at 35 days. Those fed on soaked shelled a cost of 8.89 cents per pound. corn showed a gain of 82.2 pounds, at a cost of 7.3 cents per pound; on shel lee corn and skim milk a gain of 141 pounds, at a cost of 7.4 cents per pour lem and drinking water and keep nd; on shelled corn and middlings, a gain of 99 pounds, at a cost of 8.9 ce nts per pound; on shelled corn, mid- have any sickness in your flock.

Preventing Sickness. If you will attend to the feed probpremises clean and use the copper sulphate and epaom salts, you will not